



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,822	12/31/2003	John Pafford	1842-0029	9366
28078 7590 01/08/2008 MAGINOT, MOORE & BECK, LLP CHASE TOWER 111 MONUMENT CIRCLE SUITE 3250 INDIANAPOLIS, IN 46204			EXAMINER HOFFMAN, MARY C	
			ART UNIT 3733	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/749,822	Applicant(s) PAFFORD ET AL.	
	Examiner Mary Hoffman	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-8 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

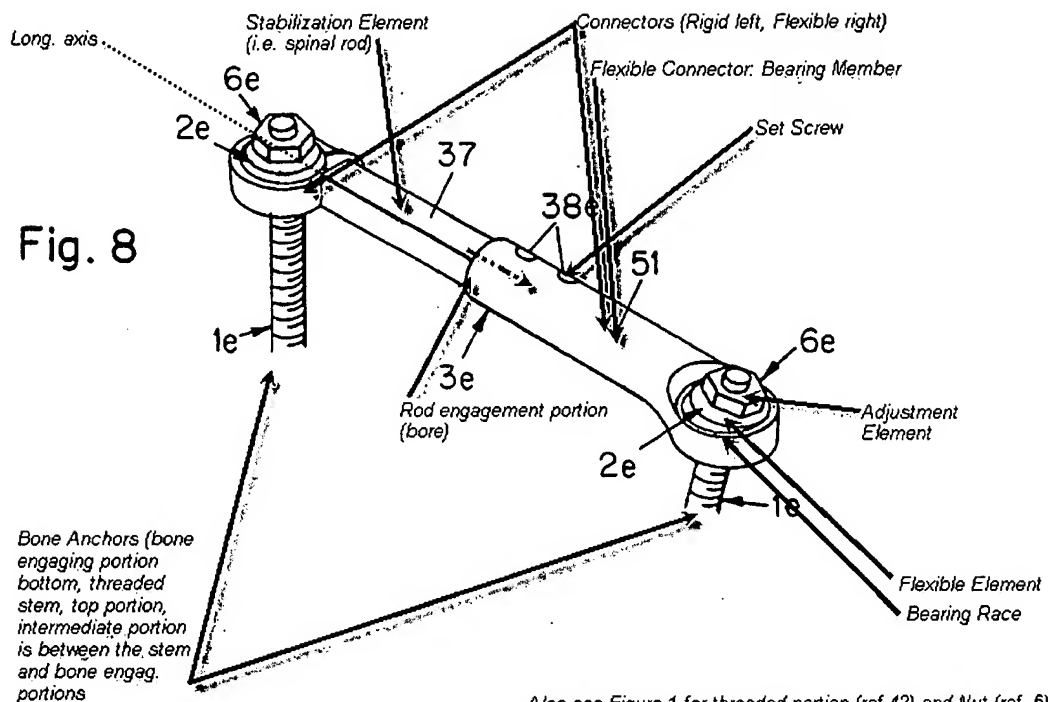
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schlapfer et al. (U.S. Patent No. 5,501,684).

Schlapfer et al. disclose a dynamic stabilization system for stabilization comprising a stabilization element (FIG. 8, ref. 37) capable of spanning between at least two vertebrae and defining a longitudinal axis along the length of the element: at least two bone anchors (ref. 1e), each having a bone engagement portion (lower half); and at least two connectors (see FIG. 8, attachment mechanisms fixing ref. 1e to the stabilization element, ref. 37) for connecting a corresponding one of the bone anchors to the stabilization element, at least one connector including; a bearing member (ref. 51) attached to the stabilization element; a compressible flexible element (ref. 2e) supported within the bearing member with the bone anchor extending through the flexible element, the flexible element contacting the bearing member substantially along the longitudinal axis of the stabilization element to permit relative pivoting between the corresponding bone anchor and the stabilization element and the flexible element is configured to expand along the longitudinal axis as the element is compressed; and an adjustment element (ref. 6e) configured to compress the flexible element to thereby adjust the flexibility of the flexible element. The stabilization element includes an elongated spinal

rod, the bearing member is a rod end bearing including a rod engagement portion; and the flexible element is a bearing element of the rod end bearing. The bearing element is received within a bearing race (integral with ref. 51, the surface along circumference of the bore in which ref. 2e is placed) of the rod end bearing; and the adjustment element is arranged to compress the bearing element within the bearing race. The rod engagement portion includes a bore for receiving a portion of the spinal rod therein and a set screw (ref. 38e) for clamping the spinal rod within the bore. The at least one of the bone anchors includes a stem having a threaded portion (see FIG. 1, ref. #42); the flexible element includes a bore for receiving the stem therethrough; and the adjustment element includes a nut engaging the threaded portion and arranged to compress the flexible element as the nut is threaded onto the threaded portion. The at least one of the bone anchors includes an intermediate portion (see FIG. 1, ref. 11) between the stem and the bone engagement portion, the intermediate portion configured to support the flexible element so that the flexible element is compressed between the intermediate portion and the nut when the nut is threaded onto the threaded portion. Another of the connectors is configured to substantially rigidly connect one of the bone anchors to the stabilization element (see FIG. 8, left side). The at least one connector including a unitary bearing member. The flexible bearing element mounted within the bearing race. The flexible element has a substantially spherical outer surface; and the bearing race defines a substantially spherical inner surface engaging the outer surface of the flexible element.

Schlapfer et al. (Patent 5,501,684)



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Schlapfer et al. (U.S. Patent No. 5,501,684).

Schlapfer et al. discloses the claimed invention except for the bearing race being mounted within the bearing member (thus indicating that the bearing race is not integral with the bearing member). It would have been obvious to one having ordinary skill in the

art at the time the invention was made to construct the bearing race not being integral with the bearing member, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Response to Arguments

Applicant's arguments filed 10/15/2007 have been fully considered but they are not persuasive. Applicant's amendments to the claims filed 10/15/2007 (see underlining in above rejection) do not appear to overcome the Schlapfer et al. reference. Applicant argues that the Schlapfer et al. reference does not show a flexible element that is compressible and configured to expand along the longitudinal axis as the element is compressed. Rather, Applicant argues that element ref. #2 expands via slits ref. # 24. Applicant also argues that the adjustment element is not configured to compress the flexible element to thereby adjust the flexibility of the element. The examiner respectfully disagrees. The element denoted by ref. #2 is clearly compressed against the inner walls of the borehole ref. #31 that receives the element, for example, as seen in FIG. 4. For something to be considered "compressible" it must merely be capable of being compressed, squeezed, or pressed against something or into a smaller space. To be compressible, the element does not need to be made of a specific material, as suggested by Applicant. Therefore, the element is "compressible" because it presses against the inner walls of borehole ref. #31 to lock the components together. Also, element ref. #2 expands in all directions as a result of its slits to press against the inner

walls of borehole ref. #31, including the direction along the longitudinal axis. Thus, the element is configured to expand along the longitudinal axis as the element is compressed. In addition, the adjustment member denoted by ref. #6 appears configured to compress the flexible element to thereby adjust the flexibility of the flexible element because the adjustment member forces the element to expand and therefore compress against the inner walls of borehole ref. #31. Because the element becomes tightly locked in the borehole due to its slit expansion and resulting compression against the inner walls of the borehole, the adjustment nut can be considered to adjust the flexibility of the flexible element as it produces this locking action.

The rejections are deemed proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Hoffman whose telephone number is 571-272-5566. The examiner can normally be reached on Monday-Friday 9:00-5:00pm.

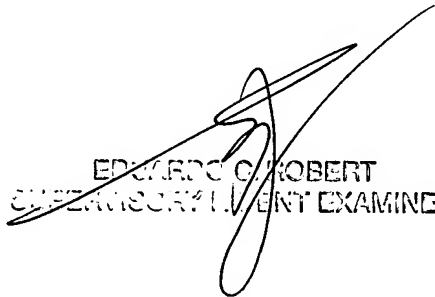
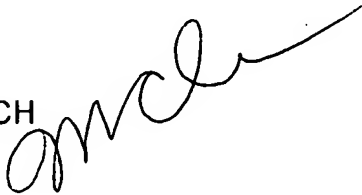
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/749,822
Art Unit: 3733

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCH



EDWARD C. ROBERT
SUPERVISOR, PATENT EXAMINER